ABSTRACT OF THE DISCLOSURE

A method and apparatus enables advanced signal processing in a wireless local area network (WLAN). First and second WLAN transceivers are provided with advanced signal processing capabilities. A maximum interframe period between data and an acknowledgement is required by the WLAN for compatibility. A duration of the interframe period is shorter than a duration that is required to perform the advanced signal processing. The first WLAN transceiver transmits a header and data. A first data field in the header is specified that enables the advanced signal processing. A second data field is specified that defines a data time period and an extension time period. The first WLAN transceiver transmits data during the data time period and dummy data during the extension time period.